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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 4692 DT-3905 09/806,676 08/15/2001 Anatolii Fel EXAMINER 07/19/2004 30377 7590 COOLEY, CHARLES E DAVID TOREN, ESQ. SIDLEY, AUSTIN, BROWN & WOOD, LLP ART UNIT PAPER NUMBER 787 SEVENTH AVENUE NEW YORK, NY 10019-6018 1723

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/806,676	FEL, ANATOLII
	omeened cammany	Examiner	Art Unit
	The MAILING DATE of this communication ann	Charles E. Cooley	1723
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1)🖂	Responsive to communication(s) filed on <u>05 Ma</u>	ay 2004.	
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.	
3)□	/— 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims			
4)🖂	Claim(s) 10-14 is/are pending in the application	<b>1.</b>	
	4a) Of the above claim(s) is/are withdraw	vn from consideration.	
-	5) Claim(s) is/are allowed.		
_	Claim(s) <u>10-14</u> is/are rejected.		
7)∐	Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9)[	The specification is objected to by the Examiner	r.	
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.			
	Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority u	ınder 35 U.S.C. § 119		
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)□ All b)□ Some * c)⊠ None of:			
	<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> </ul>		
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
* 5	See the attached detailed Office action for a list of		d.
Attachment 1) Notic	t(s) e of References Cited (PTO-892)	Δ\	(DTO 440)
	e of References Cited (PTO-692) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5) ☐ Notice of Informal Pa 6) ☐ Other:	atent Application (PTO-152)
Paper No(s)/Mail Date			

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#### **DETAILED ACTION**

### **Priority**

- 1. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-
- (d). None of the CERTIFIED copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

### Specification

2. The title of the invention and abstract are acceptable.

## Claim Rejections - 35 U.S.C. § 112, second paragraph

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Newly presented claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second paragraph of 35 U.S.C. § 112 requires a claim to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Under *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970) and In re Moore, 169 USPQ 236 (CCPA 1971), claims must be analyzed to determine their metes and bounds so that it is clear from the claim language what subject matter the claims encompass. This analysis must be performed in light of the applicable prior art and the

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disclosure. The definiteness of the claims is important to allow others who wish to enter the market place to ascertain the boundaries of protection that are provided by the claims. *Ex parte Kristensen*, 10 USPQ 2d 1701, 1703 (BPAI 1989).

One of the purposes of 35 U.S.C. § 112, second paragraph, "is to provide those who would endeavor, in future enterprise, to approach the area circumscribed by the claims of a patent, with adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance." *In re Hammack*, supra. As set forth in *Amgen Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1217, 18 USPQ2d 1016, 1030 (Fed. Cir. 1991).

The statute requires that "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." A decision as to whether a claim is invalid under this provision requires a determination whether those skilled in the art would understand what is claimed. See *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985) (claims must "reasonably apprise those skilled in the art" as to their scope and be "as precise as the subject matter permits.").

5. Newly presented claims 10-14 fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention and are therefore of indeterminate scope for the following reasons:

In the instant application and in view of newly presented claims 10-14, it appears that the preamble of claim 10 sets forth that the scope of the claims is drawn to the subcombination of the imbalance compensator device and the rotor is only functionally recited. The scope of the claims is clear as long as no further mention of the rotor appears in the claims, or the bodies of the claims refer to the rotor in a functional

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manner. A question arises as to whether the claims recite a combination or subcombination when the rotor is positively recited within the bodies of the claims wherein an inconsistency develops in the claims. The preamble indicates a subcombination of the imbalance compensator device, while in the bodies of one or more claims, there is at least one occurrence of a positive recital of structure indicating that the combination of the imbalance compensator device <u>and</u> rotor is being claimed. It is not clear if Applicant's intent is to claim merely the imbalance compensator device or the imbalance compensator device in combination with the rotor.

Claims 10-14 are therefore inconsistent and indefinite because the preambles of the claims recite the subcombination (the imbalance compensator device) for use in the combination (the imbalance compensator device in combination with the rotor) yet the elements of the imbalance compensator device and rotor are claimed in structural combination in the bodies of the claims. If the elements of the invention are claimed in combination in the bodies of the claims, the preambles must also claim them in combination or the subject matter of the preambles would not be considered consistent with limitations recited in the bodies of the claim rendering the scope of the claims indefinite. In the instant case, it is not clear as to whether the claims are intended to be combination claims of the imbalance compensator device and rotor or intended to be subcombination claims of the imbalance compensator device only. The question has arisen based on the present claiming of the subject matter of claim 11 which clearly recites structure of the rotor and positively claims the rings being mounted on such structure. Accordingly, it appears that there is at least one occurrence of a positive

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recital of structure indicating that the combination of the imbalance compensator device and rotor is being claimed which renders the scope of the claims indefinite.

Although claim 11 is met by the applied prior art below, the scope of the instant claims for future prosecution or appeal is considered drawn to the subcombination of the imbalance compensator device only.

### Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 10, 12, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Latham, Jr. (US 4,303,193).

The patent to Latham, Jr. (US 4,303,193) discloses in Fig. 7 a device used in a rotor environment comprising a compensating ring 123 or 125; an elastic ring 124 joined to the compensating ring 123 or 125; each of the rings being disposed concentrically to the axis of rotation of rotor 94 (Fig. 7); the elastic ring 124 being formed as an elastomeric ring which may include elastomeric foam (col. 12, lines 11-18); the compensating ring 123 or 125 and the elastic ring 124 being connected with each other as seen in Figure 7.

8. Claims 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rajsigl et al. (US 4,513,566).

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The patent to Rajsigl et al. (US 4,513,566) discloses in the Figure a device used in a rotor environment comprising a compensating ring 31 or 32; an elastic ring 37 joined to the compensating ring 31 or 32; each of the rings being disposed concentrically to the axis of rotation of rotor 11 as seen in the Figure; the elastic ring 37 being formed as an elastomeric ring (col. 3, lines 40-43); the compensating ring 31 or 32 and the elastic ring 37 being connected with each other as seen in the Figure and as disclosed at col. 3, lines 42-44.

9. Claims 10, 11, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott (US 2,725,188).

The patent to Scott (US 2,725,188) discloses in the Figures a device used in a rotor environment comprising a compensating ring 6; an elastic ring 23 joined to the compensating ring 6; each of the rings being disposed concentrically to the axis of rotation of rotor 2 as seen in Figure 1; the elastic ring 23 being formed as an elastomeric ring (col. 2, lines 40-42); the compensating ring 6 and the elastic ring 23 being connected with each other as seen in Figure 1 and as disclosed at col. 2, lines 56-58); the compensating ring 6 and the elastic ring 23 being mounted on the rotor drive shaft 26, 27.

10. Claims 10, 11, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Blum (US 2,827,229).

The patent to Blum (US 2,827,229) discloses in the Figures a device used in a rotor environment comprising a compensating ring 35; an elastic ring 34 joined to the compensating ring 35; each of the rings being disposed concentrically to the axis of

rotation of rotor 43 as seen in Figures 1-2; the elastic ring 34 being formed as an elastomeric ring (col. 2, lines 60-62); the compensating ring 35 and the elastic ring 34 being connected with each other as seen in Figure 2 and as disclosed at col. 2, lines 62-65); the compensating ring 35 and the elastic ring 34 being mounted on the rotor drive shaft 30, 33.

11. Claims 10, 11, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott (US 2,534,738).

The patent to Scott (US 2,534,738) discloses in the Figure a device used in a rotor environment comprising a compensating ring 22; an elastic ring 21 joined to the compensating ring 22; each of the rings being disposed concentrically to the axis of rotation of rotor (about 2) as seen in Figure 1 (the rotor being disclosed at col. 2, lines 35-40); the elastic ring 21 being formed as an elastomeric ring (col. 3, lines 58-60); the compensating ring 22 and the elastic ring 21 being connected with each other as seen in Figure 1 and as disclosed at col. 3, lines 62-66); the compensating ring 22 and the elastic ring 21 being mounted on the rotor drive shaft 19.

# Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rajsigl et al. (US 4,513,566), Scott (US 2,725,188, Blum (US 2,827,229), or Scott (US 2,534,738) in view of Kun et al. (US 4,900,165).

Rajsigl et al. (US 4,513,566), Scott (US 2,725,188), Blum (US 2,827,229), and Scott (US 2,534,738) each teach the elastic ring member in the form of an elastomeric ring such as a rubber but does not disclose the recited elastomeric foam material. The patent to Kun et al. discloses a bearing loading compensation system (Fig. 2) used in high speed rotating machinery that employs rubber or plastic which may take the configuration of elastomeric foam. In view of the suggestion of elastomeric material in Rajsigl et al. (US 4,513,566), Scott (US 2,725,188, Blum (US 2,827,229), and Scott (US 2,534,738), it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the material of the elastomeric ring member in Rajsigl et al. (US 4,513,566), Scott (US 2,725,188, Blum (US 2,827,229), and Scott (US 2,534,738), with an elastomeric foam material as taught by Kun et al. for the purpose of imparting high damping characteristics to the compensation system (col. 3, lines 29-43).

## Response to Amendment

14. Applicant's arguments filed 5 MAY 2004 have been fully considered but they are not persuasive.

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15. Applicant's arguments with respect to claims 10-14 have been considered but are moot in view of the new ground(s) of rejection necessitated by the presentation of newly submitted claims 10-14.

Contrary to Applicant's assertion, all of the applied prior art references show the elastic and compensating rings concentrically disposed to the axis of rotation of the rotor and about the drive shafts thereof as clearly seen in the referenced Figures. The drive shafts are certainly construed as meeting the recited "at a concentric surface of the rotor" and claim 11 that depends directly from claim 10 further supports this position. The elected species is the compensator at position I that is disposed about the shaft 4 as seen in instant Figure 1. If Applicant is somehow referring to the compensator at some other location shown in Figure 1 (such as position IV), such arguments are not germane to patentability of the elected species that is located solely at position I.

With regard to Latham, Jr. '193, the member 125 is defined as an "outer ring member" (see col. 12, line 12) and thus meets the broad scope of the claimed "compensating ring". The fact that the ring member 125 is fixed to support 122 is immaterial since the broad scope of the claims does not preclude such an arrangement. Applicant's statement that the ring 125 in Latham, Jr. "is spaced from the rotor" is perplexing since the elected embodiment of the compensator at position I is actually spaced from the rotor 5 itself (note it is attached to shaft 4 at a location clearly below the rotor proper as seen in Fig. 1 of the instant application). Also note the subject matter of claim 11 would appear to mandate that the rings be spaced from the rotor since they are mounted on the drive shaft. The elastic and compensating rings of the instant

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elected species and of the prior art are concentrically disposed to the axis of rotation of the rotor and about the drive shafts thereof as clearly seen in the Figures, however, with perhaps the exception of Scott '188, the elastic and compensating rings of the applied prior art are spaced either above or below the rotor itself.

#### Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles E. Cooley Primary Examiner Art Unit 1723

Charles C

13 July 2004